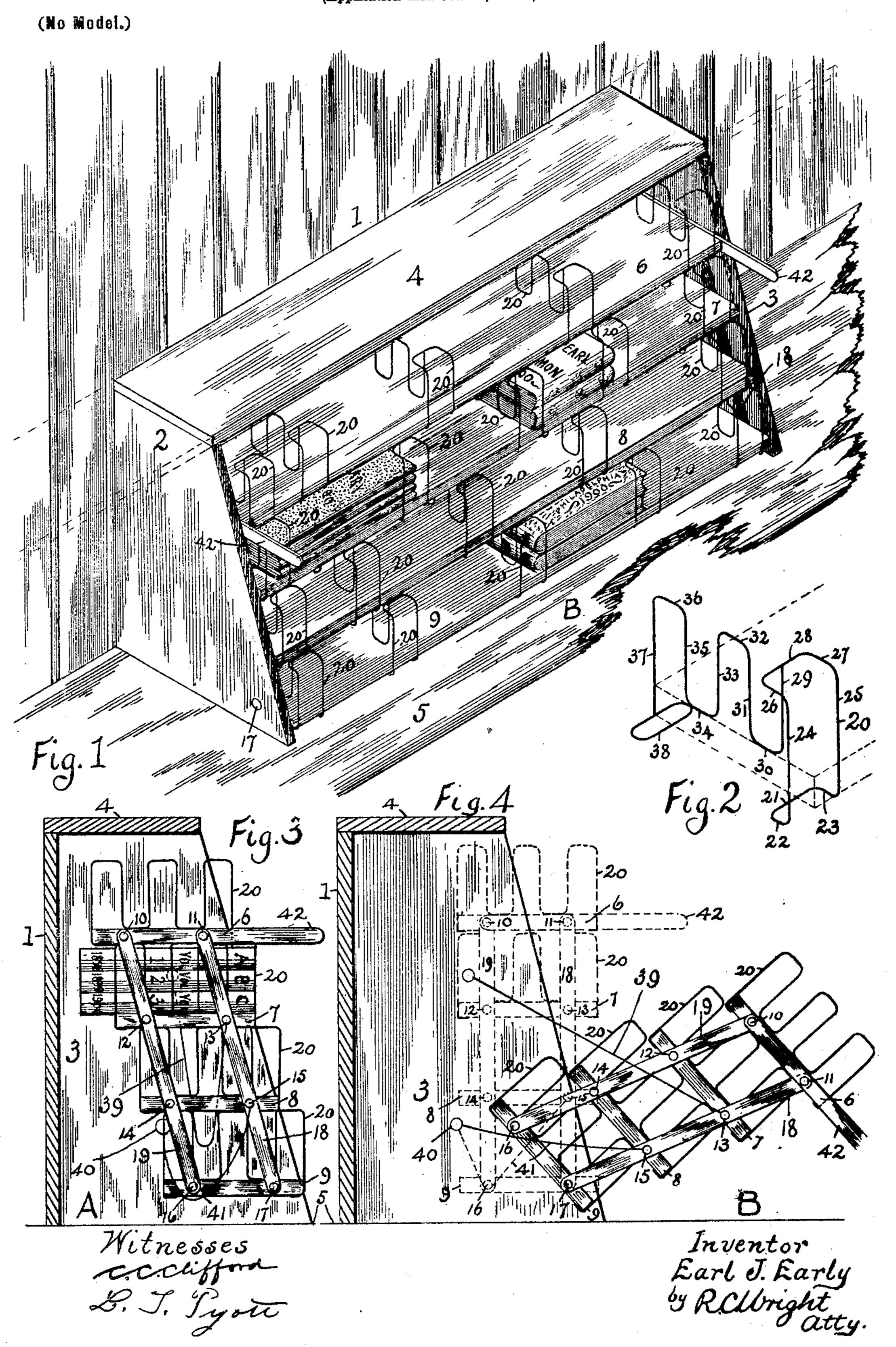
E. J. EARLY.
STORAGE AND DISPLAY DEVICE.

(Application filed Oct. 11, 1900.)



## UNITED STATES PATENT OFFICE.

EARL J. EARLY, OF PHILADELPHIA, PENNSYLVANIA.

## STORAGE AND DISPLAY DEVICE.

SPECIFICATION forming part of Letters Patent No. 679,474, dated July 30, 1901.

Application filed October 11, 1900. Serial No. 32,694. (No model.)

To all whom it may concern:

Be it known that I, EARL J. EARLY, a citizen of the United States, residing at Philadelphia, in the county of Philadelphia and 5 State of Pennsylvania, have invented certain new and useful Improvements in Storage and Display Devices, of which the following is a

specification.

My invention relates to improvements in 10 display-receptacles for stationers and other dealers in which the smaller class of books or like objects may be placed on view and guarded from loss, while being easily accessible and so placed in compartments readily ad-15 justable to the different sizes of stock carried that each and every size and style may be so exposed to view that all may readily be seen and arranged to be removed from any one compartment without the disturbance of 20 the stock in any adjoining compartment. My arrangement also provides for the occupation of a minimum amount of space and is easily adapted to be placed on counters, shelves, or in show-cases or cabinets and libra-25 ries. I attain the objects of my invention by the mechanism illustrated in the accompanying drawings, in which—

Figure 1 is a perspective view of one of a series of receptacles as arranged for a shelf | 30 or counter. Fig. 2 is a perspective view of the shifting and removable partitions for forming the compartments. Fig. 3 is an end view of the shelves, their supports, &c., as when swung into the case, the case end being 35 removed. Fig. 4 is an end view similar to Fig. 3, but with the shelves in two positions, one position shown in dotted lines to illustrate the clearance between the partitions and shelves when the supports are in vertical po-40 sition and one in full lines as when swung

out to remove or insert stock.

Similar figures of reference indicate simi-

lar parts throughout the views.

When applied as illustrated, the contain-45 ing case comprises a back 1, ends 23, top 4, and a counter or shelf 5. In the present construction I have shown four shelves 6 7 8 9, each shelf having at each end two pivotal supports, as 10 11, 12 13, 14 15, and 16 17, jour-50 naled at each end of the shelves in parallel uprights 18 19, the uprights 18 having their pivots 17 also journaled in the ends 2 3 of the las seen in dotted lines in Fig. 4, this clear-

case, so that all the movable parts are pivotally supported on the case ends by the pivots 17.

The shifting and removable partitions 20, as shown in perspective in Fig. 2, are formed of wire (although this is not absolutely essential, but is deemed preferable) and in the following manner: Underneath the outer edge 60 of a shelf is a part 21, parallel with the shelf edge, and from which pass outward the members 22 23, which thereafter upwardly bending form parts 24 25, passing by and above the shelf edge, then bend inwardly, as 26 27, 65 and form part 28, parallel with the edge of the shelf and part 21. Centrally on part 28 is attached part 29, which passes down and curves to part 30, which rests upon the top of the shelf. Another curve upward is formed 70 and part 31 extends upward, and curving backward forms part 32, level with part 28. Part 32 curves downward and forms upright part 33, which curves backward and forms 34, level with part 30, which then curves 75

upward and forms part 35, which runs up and curving backward forms part 36, level with parts 28 32, and curving downward forms part 37, which passes downward by the back edge of the shelf and joins loop 38, which 80 reaches under and grips the lower side of a shelf. Thus it will be seen that by the formation described the shelf is gripped on its top and bottom and at each edge, and as the partition can be sprung to a close grip it will 85 be securely held where placed, and any number can be used to form the various compartments desired or necessary for each shelf, as they can be readily applied and are easily shifted along the shelves to subdivide them 90

25 prevent removal of goods from the front. 95 The partitions 20, as seen in Figs. 1 and 3, reach from the top of one shelf to the bottom of the next shelf above and form distance-pieces, governing and limiting the approach of one shelf to another; but at the same time the 100 partitions are not as high as the distance apart of the shelves. When the parallel uprights 18 19 are in perpendicular position,

into any required or desired spaces, while be-

ing in skeleton form no light is obstructed

and views of the goods from different points

of observation are obtainable, and parts 24

ance permits the shelves to be freely swung in and out; but when they are swung out to a distance corresponding to the distance they are swung in in Fig. 3 the partitions again 5 touch and limit the approach of the shelves to each other. They can then continue to be swung down, as in Fig. 4, or any desired distance, the limit being controlled by a cord 39 or equivalent means secured at one end to to the case and at the other end to pivot 13. A stop 40, against which upright 19 rests, supports the shelves when swung into their case. Attached to stop 40 is one end of a flexible member 41, and at its other end it is at-15 tached to pivot 15. As seen in Fig. 3, member 41 is bent and at rest and is below and clear of pivot 16, which is made to project outward beyond upright 19. When handles 42 are grasped and the shelves are swung outwardly, 20 the member 41 is straightened by the pull given it by pivot 15, when it straightens and passes under pivot 16 and supports upright. 19 and all of its attached parts and allowing them to assume the position shown in dotted 25 lines in Fig. 4, and member 41 continues to act until the partitions 20 touch both shelves, as seen in full lines, Fig. 4. When the shelves are swung in, member 41 receives pivot 16 and cushions the movement to avoid any 30 sudden shock.

As will be seen in Figs. 3 and 4, spaces A B may be utilized for storage or display, whereas when shelves are arranged to be drawn out, as heretofore, such space cannot be utilized. 35 Besides the percentage of loss from theft, where small books and similar articles are placed on counters in promiscuous heaps, there is also a loss from much needless handling, which my invention overcomes. Also 40 much time is saved, as the goods are assorted when placed in the compartments, stockkeeping is facilitated, and a general neat, orderly, and systematic appearance is maintained. Within the case ends 2 3 sufficient 45 clearance will be afforded to prevent any friction or rubbing by the moving parts.

The inclosing cases may be made in many forms, adapted to different uses, spaces, or locations, and as ornate as desired.

Attached to pivots 10 11 are handles 42 for swinging the shelves out and in, and, if desired, a front cover may be attached to exclude dust, while where heavy articles are stored in the compartments additional means 55 may be employed to counterbalance the weight, although it is believed the use of members 41 will be found to be adequate for such purpose.

I claim—

1. In a storage and display device, a containing case, double uprights within each end of the case, pivotal attachments for the outer uprights to the case, a plurality of shelves pivotally supported upon the double uprights

for inward and outward swinging, and parti- 65 tions on the shelves which limit the approach of the shelves toward each other at the time

of said swinging movements.

2. In a device of the nature described, a case, a plurality of shelves, pivotally support- 70 ed at each end upon parallel upright supports, one of said supports at each end being pivotally supported upon the case, lifting means connected to the outer supports and to the case, a projection upon the inner supports 75 whereon the lifting means operates, and means to limit the approach of the shelves toward each other.

3. In a display device, a case, a pair of uprights within each end, one of each pair being 80 pivotally supported on the case, a plurality of shelves pivotally supported thereon at their ends for the movement of the shelves parallel to each other, and for swinging in unison out of and into the case, means to limit said 85 swinging, and means to limit the space between the shelves when swung.

4. In a display and storage receptacle, a case, uprights pivotally supported by the case, multiple shelves pivotally supported 90 thereon at their ends and adapted for swinging, and adjustable partitions on the shelves, adapted to limit the approach of adjoining shelves, and form compartments thereon.

5. As a new article of manufacture, a shift-95 ing shelf-partition, comprising a looped part passing under an edge of the shelf, thereafter in double lines upward in front of and above the shelf, backwardly turned and united to a single line of vertical parallel 100 courses united at their upper and lower parts by alternate bends, in which the lower bends touch the shelf-top, and the last course passing the opposite edge of the shelf and terminating in a loop underneath the shelf.

6. As a new article of manufacture, a shelfcompartment divider, having multiple vertical members reaching across the shelf in single alinement, the members being alternately joined at their top and bottom ends, the lower 110 joining parts resting upon the top of the shelf and the back course extending by and below the shelf and having means to pass under and grip the shelf; the front course attached at its upper end to a member which 115 is there parallel to the shelf edge, thereafter is outward turned in lines practically parallel to members reaching across the shelf, then downward turned by the shelf edge, passing thereunder and forming a means to grip the 120 shelf.

In testimony whereof I affix my signature in presence of two witnesses.

EARL J. EARLY.

Witnesses:

RANSOM C. WRIGHT, WILLIAM C. STOEVER.